

THE DER WEEKLY

www.eren.doe.gov/der

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Industry News

Greenhouse Gas Technology Center to Study CHP

The Greenhouse Gas Technology Center (GHG Center) announced that it will be conducting field testing of CHP and other DG technologies. Technologies will be tested for power quality, thermal and electrical efficiency, and pollutant and GHG emissions. The GHG Center has already completed studies of Honeywell, Capstone, and other DG technologies. Vendors interested in having their products tested can contact the GHG Center for an application at www.sri-trp.com or lindabeard@sri-itp.com.

Source: FC Connection, November 2001

DCH Fuel Cell Planned for Ft. Jackson

LOGANEnergy has received a contract from the U.S. Army Corps of Engineers' Construction Engineering Research Laboratory (CERL) to provide a three-kilowatt DCH Enable™ Fuel Cell for the Army's Ft. Jackson facility in South Carolina. The fuel cell will be connected to the grid and use a natural gas reformer. Sam Logan, CEO of LOGANEnergy said, "PEM fuel cells are an attractive technology for residence, office, and remote facility applications where high-quality, uninterrupted electric power...is a must. This is an excellent opportunity for LOGAN and CERL to validate these characteristics over time in actual everyday living and working conditions."

Source: DCH Technology Press Release, November 14

NYPA Offsets Gas Turbine Emissions

In order to offset air emissions from ten natural gas-fired turbines in New York City, the New York Power Authority (NYPA) is installing fuel cell systems in four wastewater treatment facilities near the turbine sites. One fuel cell will be installed on Staten Island, two each in Brooklyn and Queens, and three in the Bronx. All eight will be powered by hydrogen extracted from the anaerobic digester gas produced by the treatment facilities. The \$23 million program is expected to reduce emissions by 164 tons per year, thus filling NYPA's pledge to offset emissions from the ten turbines.

Source: Business Wire, December 4, 2001

CCEF Receives 31 Fuel Cell Proposals

In response to its Fuel Cell Initiative request for proposals, the Connecticut Clean Energy Fund (CCEF) has received 31 proposals. Of the proposals, seventeen were for commercial applications, nine were for technology demonstrations, and five were for operational performance demonstrations. All concern either molten carbonate, phosphoric acid, proton exchange membrane, or solid oxide fuels cells. "This high response rate

clearly indicates that there is interest among businesses in the Northeast to demonstrate and commercialize fuel cells," according to CCEF Managing Director of Technology Subhash Chandra. Although CCEF expects to invest only \$6 million, the 31 proposals together requested \$60 million.

Source: CCEF Press Release, November 30, 2001

CA Power Authority Issues Request for Bids

The California Consumer Power and Conservation Financing Authority, a division of the California Power Authority, has posted a Request for Bids document at www.capowerauthority.ca.gov/Requestforbids/main.asp. Those interested in offering bids in the areas of fuel cells, CHP, or decentralized solar power can go to the link above or contact Tracy Saville at tracy.saville@dgs.ca.gov or (916) 651-9799.

Source: www.capowerauthority.ca.gov

PIER Program RFP

The Public Interest Energy Research (PIER) Program, administered by the California Energy Commission, funds certain public interest research, development, and demonstration (RD&D) efforts that will advance energy science or technology not adequately funded by competitive on regulated markets. PIER's mission is to conduct public interest energy RD&D that improves the quality of life for Californians by providing environmentally sound, safe, reliable, and affordable energy services and products. RD&D organizations include individuals, businesses, utilities, and public and private research institutions.

A new PIER Program request for proposals (RFP) targets Advanced Reciprocating Internal Combustion Engine Systems research, development, and demonstration projects for distributed generation applications in California. The tentative schedule for this RFP, key activities, and dates for this RFP can be found by calling (916) 654-4392 or visiting www.energy.ca.gov to confirm pre-bid conference dates and locations.

DOE News

DER Website Gets a Face Lift

The DER website has undergone a major overhaul. The site address has not changed, but its content, graphics, and layout have been modified to reflect the expanding arena of distributed energy resources. The site features links to all of the programs within the DER office and several new potential areas, including Hybrid Power Systems and Communications and Controls. The

(Continued on page 2)

website is planning to have links to regulatory and policy issues along with state and local information.

SSEB Holds Workshop to Develop DER Strategy

The Southern States Energy Board (SSEB), in conjunction with the Department of Energy's Office of Power Technologies, held a workshop November 27-28 in Atlanta, Georgia, to develop a "Southern strategy" for DER. The workshop, organized for the Atlanta Regional Office by the SSEB with assistance from Oak Ridge National Lab, covered the definition of DG and the benefits, barriers and gaps to DG market penetration. A diverse group of approximately 35 stakeholders from various utilities and utility commissions, energy service companies, DOE, manufacturers, environmental interest parties, state regulators, and the Director of the North Carolina State Energy Office discussed the current state of distributed generation in the southeast and to identify ways to accelerate and widen its use. Gary Burch and Joe Galdo attended the event and represented the Office of DER.

The group held a lively discussion and reached the conclusion that several issues needed to be addressed in the region to enable DER development. Clarity of state regulatory policy, practices, and processes that permit DER to be considered on a level basis with other options is needed. The Texas model for addressing the DER issues was lauded as a useful process for developing a regional or multi-state regulatory initiative in the south.

The workshop finished on the second day with actions identified that would better allow the use of DG in the mostly regulated southeastern states. Issues identified for follow-on action included: cost and pricing transparency, identifying and supporting DER demonstrations to show the value of DER, and identification of markets where DER has the most customer value. Adapting the Texas regulatory model, targeting niche markets, technology breakthroughs, and the development and implementation of environmentally friendly DG were also mentioned.

The workshop's goal was to formulate a southern DG

implementation strategy. This strategy will be available in January with the conference proceedings. Additional funding will be sought by SSEB for the action plan's implementation.

Regional Office News

ARO Plans DER Conference with FEMP

FEMP HQ is providing resources to conduct a FEMP distributed energy resources workshop in the Southeast region. The workshop is planned for Spring 2002 and will be coordinated in partnership with Oak Ridge National Laboratory. The Chicago, Seattle, and Boston regional Offices are also designated to have these workshops.

Policy News

Senate Democrats Introduce Energy Bill

Senate Majority Leader Tom Daschle (D-SD) and Chairman of the Senate Committee on Energy and Natural Resources Jeff Bingman (D-NM) have introduced *S. 1766*, the Energy Policy Act of 2002. According to Senator Bingman's office, the new legislation raises funding for research and development of renewable energy from \$400 million to \$500 million in 2003 and \$733 million in 2006. In addition, the bill would require 10% of all energy in the U.S. to be generated from renewable sources and require electric utilities to make net metering services available upon request. Senator Daschle said the bill "invests in new ways of thinking. It balances production with conservation and creates thousands of new jobs in the process." On the other hand, a spokesman for the conservative-leaning Competitive Enterprise Institute said, "The cost of this bill is going to be staggering.... We expected a pig, but we expected him to put some lipstick on it." *Source: Denver Post, December 6, 2001; Senator Jeff Bingman Press Release, December 5, 2001; San Francisco Chronicle, December 6, 2001; www.energy.senate.gov*

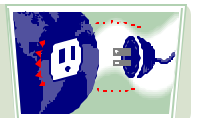
By the Numbers

The Public Interest Energy research Program within the California Energy Commission has sponsored 54 DER-related projects with \$39.8M in funding. Here are some of the projects areas and their level of funding:

\$28.3M	Generation
\$6.5M	Systems Effects
\$5.0M	Market Integration

More information can be found at www.energy.ca.gov/pier

What's on the Web



Case Study Form Distributed Generation Installation

Public Technology Inc and its Urban Consortium Energy Task Force (UCETF) are conducting an assessment of the code, installation, and other issues regarding the installation and use of distributed technology. This research includes establishing a database of case studies for use in guiding local government through the permitting and installation processes.

www.pti.org/task_forces/energy/survey/case_study_form.html

The First Annual DER Conference and Peer Review

The Power to Choose: Creating an Expanded DER Industry

November 28-30, 2001—Washington, DC

The First Annual U.S. Department of Energy (DOE) Distributed Energy Resources Conference and Peer Review took place November 28-30 in Washington, DC. Approximately 225 people attended the event, which was hosted by the Office of Distributed Energy Resources (DER) within DOE's Office of Power Technologies. Participants from Federal and state agencies, DOE laboratories, private industry, non-profit organizations, and academia came to the conference to exchange ideas and learn more about DER activities at DOE and around the country.

The conference was kicked-off by a tour of the University of Maryland, College Park's (UMD) DER-integrated energy-systems-test facility. The building incorporates a number of distributed energy technologies to determine how and in what configurations they best operate. Approximately 30 people toured the facility, which was led by UMD students who are currently monitoring and studying the system.

The first day's speakers* focused on establishing a goal for DER and related DER efforts nationwide. **Patricia Hoffman**, Office Director for the Office of Distributed Energy Resources, welcomed the audience and discussed the DER Program at DOE and the importance of the peer review.

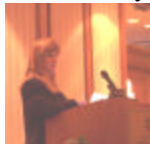


Patricia Hoffman



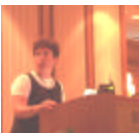
Robert Dixon

Day two of the conference consisted of technology program presentations after **Dr. Robert K. Dixon**, Deputy Assistant Secretary for the Office of Power Technologies, provided opening remarks. **Merrill Smith** and



Merrill Smith

Steve Waslo gave presentations on the Industrial Gas Turbines Program, and Ms. Smith also presented the



Debbie Haught

Combined Heat and Power Program later in the afternoon. **Debbie Haught** presented program overviews for the Microturbines and Reciprocating Engines



Ron Fiskum

Programs. **Ron Fiskum** gave presentations on both the Building Fuel Cells and Thermally Activated



Imre Gyuk

Technologies, and Packaged Systems for Buildings Programs were presented by **Phil Fairchild** and **Ren Anderson**. **Imre Gyuk** and **John Boyes** provided a discussion on the Energy



Joe Galdo

Storage Program. **Joe Galdo** gave an overview of the Industrial Distributed Generation and Distributed Power Programs, with **Dick DeBlasio** highlighting NREL's activities.



Phil Overholt

The presentation for the Transmission Reliability Program, given by



Larry Mansueti

Philip Overholt and **Margie Tatro**, wrapped things up for the day. **Larry Mansueti**, Office of Power Technologies, discussed DOE's Electricity Restructuring Program during lunch.

The final day of the conference started with an update on DER activities at Federal facilities, provided by **Beth Shearer**, Director of the Federal Energy Management Program. Three representatives from DOE regional offices, **Al Benson** (Boston), **Gary Nowakowski** (Chicago), and **Arun Jhaveri** (Seattle), described current DER activities in their areas. **John Boyes**, Sandia National Laboratory; **Ben Kroposki**, National Renewable Energy Laboratory; and **John Kueck**, Oak Ridge National Laboratory, also provided updates on DER activities within the laboratory network. New DER opportunities were presented in the second half of the morning; **Gary Burch** discussed hybrid systems and **Eric Lightner** discussed communications and control systems.



Gary Burch



Eric Lightner

For a complete list of speakers and their presentations, please visit the DER web site at www.eren.doe.gov/der. This information will be available at the end of December.

**The conference was addressed by more than 50 speakers. Due to this high number, only U.S. DOE speakers are mentioned in this article and only pictures of the DER office staff are included.*

Calendar of Events

DECEMBER 2001

11-13	Power-Gen International	Las Vegas, NV	www.pennwellevents.com
11-12	Workshop on Interconnecting Distributed Generation	Honolulu, HI	mtome@dbedt.hawaii.gov or call: 808-587-3809; www.state.hi.us/dbedt/ert

JANUARY 2002

10-11	Fundamentals of Energy Management	Dallas, TX	www.aeecenter.org/seminars
14-15	Material Technologies for Fuel Cells and Power Electronics	Cocoa Beach, FL	www.ceramics.org/meetings/ECD2002/expo.asp
17-18	Annual Workshop on Microturbine Applications	College Park, MD	Sandra Maldonado maldonadosl@ornl.gov
28-Feb.1	Distributed Power Program Annual Review Meeting	Arlington, VA	kimberly_taylor@nrel.gov
29-Feb.1	Reducing Your Energy Costs Conference and Exhibit	New Orleans, LA	Stuart Steller, 781-939-2411, s.steller@cbinet.com

FEBRUARY 2002

27-Mar 1	DistribuTECH	Miami Beach, FL	www.pennwellevents.com
2	Distributed Resources, Renewables and the Environment	Portland, OR	newsdata@newsdata.com ; 503-230-5884 (Bonneville Power Administration)
4-7	ICEPAG 2002	Newport Beach, CA	www.parcon.uci.edu/colloquium
6-7	Fuel Cell Dynamics: Reality, Not Hype	New York, NY	www.alliedworld.com
11-13	NASEO 2002 Energy Outlook Conference	Washington, DC	www.naseo.org/events/default.htm
20-22	New and Emerging Technologies Conference	Tucson, AZ	www.nreca.org/edu_events/conferences/newtech/html/conference.html
Feb 25-March 1	Turbine Power Systems Conference and Condition Monitoring Workshop	Galveston, TX	www.netl.doe.gov

MARCH 2002

7-8	Distributed Generation	South San Francisco, CA	www.aeecenter.org/seminars
11-13	6th Annual Distributed Generation & On-Site Power Conference	Atlanta, GA	www.dist-gen.com ; 508-427-9470; gesi@mediaone.net
14-15	Fundamentals of Energy Management	Las Vegas, NV	www.aeecenter.org/seminars
12-14	Microturbine Program Review	Fairfax, VA	Debbie Haught 202-586-2211
17-21	EPRI's 7th Distributed Resources Conference and Expo	Dallas, TX	www.epri.com/programHigh.asp?program=238295&objid=266151
19-21	Electric Power 2002	St. Louis, MO	www.electricpowerexpo.com
20-23	Building Energy Conference	Medford, MA	www.nesea.org ; 877-44SOLAR, ext. 20
25-26	Fundamentals of Cogeneration & On-site Generation	Philadelphia, PA	www.aeecenter.org/seminars
27-28	GLOBALCON Energy/Facilities Management Conference & Expo	Philadelphia, PA	www.aeecenter.org/seminars